

RESULT 2
US-10-796-280-504

; Sequence 504, Application US/10796280
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; STENOSIS, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001510
; CURRENT APPLICATION NUMBER: US/10/796,280
; CURRENT FILING DATE: 2004-03-10
; NUMBER OF SEQ ID NOS: 68533
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 504
; LENGTH: 3374
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-796-280-504

Query Match 99.9%; Score 3370; DB 57; Length 3374;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 3364; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

Qy	1	CTCACCCCGCTCTCCGGCGCCGCCGGTGCAGGGTCTCCGCTACCGCTCCCTCCCGTTC	60
Db	1	CTCACCCCGCTCTCCGGCGCCGCCGGTGCAGGGTCTCCGCTACCGCTCCCTCCCGTTC	60
Qy	61	TGTGCTCTCTCGCTCTGGCTCCCCACCCCTCTCCCTCCCTCTCCCCTTGCCT	120
Db	61	TGTGCTCTCTCGCTCTGGCTCCCCACCCCTCTCCCTCCCTCTCCCCTTGCCT	120
Qy	121	CCCCCTCTCGCAGGCCCTGCATTATTTCTGCCGCAGGCTCGGCTTGACTGCTGTC	180
Db	121	CCCCCTCTCGCAGGCCCTGCATTATTTCTGCCGCAGGCTCGGCTTGACTGCTGTC	180
Qy	181	CAGCCCGGGGAGGTGGCTGGGTGGGGAGGAGACTGTGCAAGTTGAGGGAGGGGG	240
Db	181	CAGCCCGGGGAGGTGGCTGGGTGGGGAGGAGACTGTGCAAGTTGAGGGAGGGGG	240
Qy	241	TGCCCTTCTTCCCCTCCCTTCCCCGCCAACCTCCTCCCTCCCCCTTCCCTCCCCCTTC	300
Db	241	TGCCCTTCTTCCCCTCCCTTCCCCGCCAACCTCCTCCCTCCCCCTTCCCTCCCCCTTC	300
Qy	301	CCCTCCCGCCCCCACCTCTCTCCCTCGGAAGGACTGGTAACCTGCGTGCAGGAGC	360
Db	301	CCCTCCCGCCCCCACCTCTCTCCCTCGGAAGGACTGGTAACCTGCGTGCAGGAGC	360
Qy	361	GAACGGCGCGCGCGCGCGCGCGCACCATCCAGGGGGCACATGGGCACGTCCGC	420
	:		
Db	361	GRACGGCGCGCGCGCGCGCGCACCATCCAGGGGGCACATGGGCACGTCCGC	420
Qy	421	GCTCTGGCGCTCTGGCTGCTGCTCGCGCTGTGCTGGGGCGCCCGGGAGAGCGGCCAC	480
Db	421	GCTCTGGCGCTCTGGCTGCTGCTCGCGCTGTGCTGGGGCGCCCGGGAGAGCGGCCAC	480
Qy	481	CGGAACCGGGAGAAAAGCCAATGTGAACCCCTCCAATTCCAGTCACAATGGTCGTG	540
Db	481	CGGAACCGGGAGAAAAGCCAATGTGAACCCCTCCAATTCCAGTCACAATGGTCGTG	540
Qy	541	TATTACCGCTGTGAAATGTGATGGGATGAAGACTGTGTTGACGGCAGTGTGAAAA	600
Db	541	TATTACCGCTGTGAAATGTGATGGGATGAAGACTGTTGACGGCAGTGTGAAAA	600
Qy	601	GAACTGTAAAGAAGACGTGTGCTGAATCTGACTTCGTGCAACAATGGCCAGTGTG	660
Db	601	GAACTGTAAAGAAGACGTGTGCTGAATCTGACTTCGTGCAACAATGGCCAGTGTG	660
Qy	661	TCCCAGCGATGGAAGTGTGATGGAGATCCTGACTGCGAAGATGGTCAGATGAAAGCCC	720
Db	661	TCCCAGCGATGGAAGTGTGATGGAGATCCTGACTGCGAAGATGGTCAGATGAAAGCCC	720
Qy	721	AGAACAGTGCCATATGAGAACATGCCGCATACATGAAATCAGCTGTGGCGCCCATCTAC	780
Db	721	AGAACAGTGCCATATGAGAACATGCCGCATACATGAAATCAGCTGTGGCGCCCATCTAC	780
Qy	781	TCAGTGTATCCCACTGTGCTGGAGATGTGATGGTAAAGATGATTGTCAGTGGAGAAGA	840
Db	781	TCAGTGTATCCCACTGTGCTGGAGATGTGATGGTAAAGATGATTGTCAGTGGAGAAGA	840
Qy	841	TGAAGAAAATGTGGCAATAACATGTAGTCGGACGAGTTCACCTGCTCCAGTGGCG	900
Db	841	TGAAGAAAATGTGGCAATAACATGTAGTCGGACGAGTTCACCTGCTCCAGTGGCG	900
Qy	901	CTGCATCCAGGAATTGTATGCAATGGCCAGGATGACTGCAGCGATGGCAGTGTGA	960

Db 901 ||||||| CTGCACTCCAGGAACCTTGTATGCAATGGCCAGGATGACTGCAGCGATGGCAGTGATGA 960
Qy 961 GCTGGACTGTGCCCGCAACCTGTGGGCCCATGAGTTCCAGTCAGCACCTCCTCTG 1020
Db 961 ||||||| GCTGGACTGTGCCCGCAACCTGTGGGCCCATGAGTTCCAGTCAGCACCTCCTCTG 1020
Qy 1021 CATCCCCATCAGCTGGGTATGCGACGATGATGCAAGACTCTCCGACCAATCTGATGAGTC 1080
Db 1021 ||||||| CATCCCCATCAGCTGGGTATGCGACGATGATGCAAGACTCTCCGACCAATCTGATGAGTC 1080
Qy 1081 CCTGGAGCAGTGTGGCCGTAGCCAGTCATACACACCAAGTGTCCAGCCAGCAGCAAATCCA 1140
Db 1081 ||||||| CCTGGAGCAGTGTGGCCGTAGCCAGTCATACACACCAAGTGTCCAGCCAGCAGCAAATCCA 1140
Qy 1141 GTGCCGCTCTGGCGAGTGCATCCATAAAGAAGTGGCGATGTGATGGGACCCCTGACTGCAA 1200
Db 1141 ||||||| GTGCCGCTCTGGCGAGTGCATCCATAAAGAAGTGGCGATGTGATGGGACCCCTGACTGCAA 1200
Qy 1201 GGATGGCAGTGTGAGGTCAACTGTCCCCTCGAACCTGCCGACCTGACCAATTGAAATG 1260
Db 1201 ||||||| GGATGGCAGTGTGAGGTCAACTGTCCCCTCGAACCTGCCGACCTGACCAATTGAAATG 1260
Qy 1261 TGAGGATGGCAGCTGCATCCATGGCAGCAGGAGTGTAAATGGTATCGAGACTGTGTCGA 1320
Db 1261 ||||||| TGAGGATGGCAGCTGCATCCATGGCAGCAGGAGTGTAAATGGTATCGAGACTGTGTCGA 1320
Qy 1321 TGGTCCGATGAAGTCAACTGCAAAATGTCAATCAGTGCCTGGGCCCTGGAAAATTCAA 1380
Db 1321 ||||||| TGGTCCGATGAAGTCAACTGCAAAATGTCAATCAGTGCCTGGGCCCTGGAAAATTCAA 1380
Qy 1381 GTGCAGAAGTGGAGAATGCATAGATATCAGCAAAGTATGTAACCAGGAGCAGGACTGCG 1440
Db 1381 ||||||| GTGCAGAAGTGGAGAATGCATAGATATCAGCAAAGTATGTAACCAGGAGCAGGACTGCG 1440
Qy 1441 GGACTGGAGTGTGAGCCCTGAAAGAGTGTATATAAACGAATGCTTGGTAAATAATGG 1500
Db 1441 ||||||| GGACTGGAGTGTGAGCCCTGAAAGAGTGTATATAAACGAATGCTTGGTAAATAATGG 1500
Qy 1501 TGGATGTTCTCATATCTGCAAAGACCTAGTTATAGGCTACAGTGTGACTGTGAGCTGG 1560
Db 1501 ||||||| TGGATGTTCTCATATCTGCAAAGACCTAGTTATAGGCTACAGTGTGACTGTGAGCTGG 1560
Qy 1561 GTTTGAACTGATAGATAGAAAACCTGTGGAGATATTGATGAATGCCAAATCCAGGAAT 1620
Db 1561 ||||||| GTTTGAACTGATAGATAGAAAACCTGTGGAGATATTGATGAATGCCAAATCCAGGAAT 1620
Qy 1621 CTGCAGTCAAATTGTATCAACTTAAAGGCCGTTACAAGTGTGAATGTAGTCGTGGCTA 1680
Db 1621 ||||||| CTGCAGTCAAATTGTATCAACTTAAAGGCCGTTACAAGTGTGAATGTAGTCGTGGCTA 1680
Qy 1681 TCAAATGGATCTTGTACTGGCGTGTGCAAGGCAGTAGGCCAAAGGCCAAGTGTGATCTT 1740
Db 1681 ||||||| TCAAATGGATCTTGTACTGGCGTGTGCAAGGCAGTAGGCCAAAGGCCAAGTGTGATCTT 1740
Qy 1741 CACTAATCGAAGAGACATCGGAAGATTGGCTTAGAGAGGAAAGAAATATCCAACTAGT 1800
Db 1741 ||||||| CACTAATCGAAGAGACATCGGAAGATTGGCTTAGAGAGGAAAGAAATATCCAACTAGT 1800
Qy 1801 TGAACAGCTAAGAAACACTGTGGCTCTGATGCTGACATTGCTGCCAGAAACTATTCTG 1860
Db 1801 ||||||| TGAACAGCTAAGAAACACTGTGGCTCTGATGCTGACATTGCTGCCAGAAACTATTCTG 1860
Qy 1861 GGCGATCTAAGCCAAAAGCTATCTCAGTCCTCAATTGATGACAAGGTTGGTAGACA 1920
Db 1861 ||||||| GGCGATCTAAGCCAAAAGCTATCTCAGTCCTCAATTGATGACAAGGTTGGTAGACA 1920
Qy 1921 TGTAAAATGATCGACAATGTCATAATCCTGCAGCCATTGCTGTTGATTGGGTGTACAA 1980
Db 1921 ||||||| TGTAAAATGATCGACAATGTCATAATCCTGCAGCCATTGCTGTTGATTGGGTGTACAA 1980
Qy 1981 GACCCTACTGGACTGATGCCCTCTAAGACTATTCTAGTAGCTACCCCTAGATGGAAC 2040
Db 1981 ||||||| GACCCTACTGGACTGATGCCCTCTAAGACTATTCTAGTAGCTACCCCTAGATGGAAC 2040
Qy 2041 CAAGAGGAAGTCCCTGTTAACCTGACTTGCAGAGGCCCTGCTCCATAGCTGGACCC 2100
Db 2041 ||||||| CAAGAGGAAGTCCCTGTTAACCTGACTTGCAGAGGCCCTGCTCCATAGCTGGACCC 2100
Qy 2101 ACTGTCCTGCTTTGTTACTGGTCAGACTGGGTGAACCGCTAAATAGAAAAAGCAGG 2160
Db 2101 ||||||| ACTGTCCTGCTTTGTTACTGGTCAGACTGGGTGAACCGCTAAATAGAAAAAGCAGG 2160
Qy 2161 AATGAATGGATTGATAGACGTCCACTGGTACAGCGGATATCCAGTGGCTAACCGGAAT 2220
Db 2161 ||||||| AATGAATGGATTGATAGACGTCCACTGGTACAGCGGATATCCAGTGGCTAACCGGAAT 2220
Qy 2221 TACACTTGACCTTATAAAAGTCGCCCTATTGGCTTATTGATGACATGTTATC 2280

Db	2221 TACACTTGACCTTATAAAAGTCGCCCTATTGGCTTGAATTCAAGTTGACACATGTTATC 2280
Qy	2281 CAGCGTGGACTTGAATGGCCAAGATCGTAGGATAGTACTAAAGTCTCTGGAGTTCCCTAGC 2340
Db	2281 CAGCGTGGACTTGAATGGCCAAGATCGTAGGATAGTACTAAAGTCTCTGGAGTTCCCTAGC 2340
Qy	2341 TCATCCTTGCACTAACAATATTGAGGATCGTGTCTACTGGATAGATGGGAAAATGA 2400
Db	2341 TCATCCTTGCACTAACAATATTGAGGATCGTGTCTACTGGATAGATGGGAAAATGA 2400
Qy	2401 AGCAGTCTATGGTGCCAATAATTCACTGGATCAGAGCTAGCCACTCTAGTCACAAACCT 2460
Db	2401 AGCAGTCTATGGTGCCAATAATTCACTGGATCAGAGCTAGCCACTCTAGTCACAAACCT 2460
Qy	2461 GAATGATGCCAAGACATCATTTGCTATCATGAACCTGTACAGCCATCAGGTTAAAATTG 2520
Db	2461 GAATGATGCCAAGACATCATTTGCTATCATGAACCTGTACAGCCATCAGGTTAAAATTG 2520
Qy	2521 GTGTGAAGAACATGGAGAATGGAGGATGTGAATACCTATGCCCTGCCAGCACACAGAT 2580
Db	2521 GTGTGAAGAACATGGAGAATGGAGGATGTGAATACCTATGCCCTGCCAGCACACAGAT 2580
Qy	2581 TAATGATCACTCTCCAAAATACCTGTTCTGTCCCAGTGGGTACAATGTAGAGGAAA 2640
Db	2581 TAATGATCACTCTCCAAAATACCTGTTCTGTCCCAGTGGGTACAATGTAGAGGAAA 2640
Qy	2641 TGGCGAGACTGTCAAAAGGATCAATGTGACCACAGCAGTATCAGAGGTAGTGTCCCC 2700
Db	2641 TGGCGAGACTGTCAAAAGGATCAATGTGACCACAGCAGTATCAGAGGTAGTGTCCCC 2700
Qy	2701 AAAAGGGACTTCTGCCCATGGGCATTCTCTCTTGTCTTAGTGTAGGGCAGCAGT 2760
Db	2701 AAAAGGGACTTCTGCCCATGGGCATTCTCTCTTGTCTTAGTGTAGGGCAGCAGT 2760
Qy	2761 AGGTGGCTACTTGATGTGGCGAATTGCCAACACAAGAACATGAAAGCATGAACATTG 2820
Db	2761 AGGTGGCTACTTGATGTGGCGAATTGCCAACACAAGAACATGAAAGCATGAACATTG 2820
Qy	2821 CAATCCCTGTGACTTGTGAAACACTGAAAGAGGACCTCTCCATAGACATTGGTAGACACAG 2880
Db	2821 CAATCCCTGTGACTTGTGAAACACTGAAAGAGGACCTCTCCATAGACATTGGTAGACACAG 2880
Qy	2881 TGCTTCTGTTGGACACACGTACCCAGCAATATCAGTTGTAAGCACAGATGATCTAGC 2940
Db	2881 TGCTTCTGTTGGACACACGTACCCAGCAATATCAGTTGTAAGCACAGATGATCTAGC 2940
Qy	2941 TTGACTTCTGTGACAAATGTTGACCTTGAGGTCTAAACAAATAACCCCGTCGGAAT 3000
Db	2941 TTGACTTCTGTGACAAATGTTGACCTTGAGGTCTAAACAAATAACCCCGTCGGAAT 3000
Qy	3001 GGTAAACCGAGGCCAGCAGCTGAAGTCTTTCTCCCTCTCGCTGGAAGAACATCAAGA 3060
Db	3001 GGTAAACCGAGGCCAGCAGCTGAAGTCTTTCTCCCTCTCGCTGGAAGAACATCAAGA 3060
Qy	3061 TACCTTCTGCGGATCAAGCTTGTAACCGTTTATATTACTTTGTAATATT 3120
Db	3061 TACCTTCTGCGGATCAAGCTTGTAACCGTTTATATTACTTTGTAATATT 3120
Qy	3121 CTTGTCACATTCTACTTCAGCTTGATGTGGTACCGAGTATCTGTAACCCCTGAATT 3180
Db	3121 CTTGTCACATTCTACTTCAGCTTGATGTGGTACCGAGTATCTGTAACCCCTGAATT 3180
Qy	3181 TCTAGACAGTATTGCCACCTCTGGCAAATATGCACTTCCCTAGAAAGCCATATTCCAG 3240
Db	3181 TCTAGACAGTATTGCCACCTCTGGCAAATATGCACTTCCCTAGAAAGCCATATTCCAG 3240
Qy	3241 CAGTGAAACTTGTGCTATAGTGTATACCAACCTGTACATACATTGTATAGGCCATCTGTAA 3300
Db	3241 CAGTGAAACTTGTGCTATAGTGTATACCAACCTGTACATACATTGTATAGGCCATCTGTAA 3300
Qy	3301 ATATCCCGAACAAACGGGTTACTAAGATGAAATTGCCAAAAAAATTATAAAACTAATT 3360
Db	3301 ATATCCCGAACAAACGGGTTACTAAGATGAAATTGCCAAAAAAATTATAAAACTAATT 3360
Qy	3361 TGTACGTATGAATG 3374
Db	3361 TGTACGTATGAATG 3374

RESULT 5
ABX62889
ID ABX62889 standard; cDNA; 3622 BP.
XX
AC ABX62889;
XX
DT 25-FEB-2003 (first entry)
XX
DE Human activated T cell cDNA #5.
XX
KW T cell; gene; ss; differential expression; T cell activation;
KW antiallergic; cytostatic; immunosuppressive; antimicrobial; gene therapy;
KW allergy; cancer; graft versus host disease; infection;
KW autoimmune disorder.
XX
OS Homo sapiens.
XX
PN US2002137077-A1.
XX
PD 26-SEP-2002.
XX
PF 25-OCT-2001; 2001US-00002600.
XX
PR 25-OCT-2000; 2000US-0243521P.
XX
PA (HOPK/) HOPKINS C M.
PA (PETE/) PETERSON D P.
PA (COCK/) COCKS B G.
PA (HAWK/) HAWKINS P R.
XX
PI Hopkins CM, Peterson DP, Cocks BG, Hawkins PR;
XX
DR WPI; 2003-102381/09.
XX
PT New combination comprising several cDNAs that are differentially
PT expressed in activated T cells, useful for diagnosing, treating, staging
PT or monitoring treatment for allergy, cancer, infectious and/or autoimmune
PT disorders.
XX
PS Claim 1; Page; 180pp; English.
XX
CC This invention relates to the sequences of several cDNAs that are
CC differentially expressed in activated T cells. The sequences of the
CC invention may have antiallergic, cytostatic, immunosuppressive and
CC antimicrobial activity and may be used in gene therapy. The invention
CC also comprises a method for screening samples for differentially
CC expressed genes and a method for detecting these cDNAs by hybridisation.
CC The methods and compositions of the present invention are useful for
CC diagnosing, treating, staging or monitoring treatment for allergy,
CC cancer, chronic graft versus host disease, infectious and/or autoimmune
CC disorders. The present sequence represents a cDNA of the invention that
CC is differentially expressed in activated T cells
XX
SQ Sequence 3622 BP; 965 A; 838 C; 902 G; 916 T; 0 U; 1 Other;

Query Match 92.6%; Score 3125.6; DB 8; Length 3622;
Best Local Similarity 96.2%; Pred. No. 0;
Matches 3292; Conservative 0; Mismatches 35; Indels 96; Gaps 5;

Qy 12 CTCCGGCCGCCGCCGGTGCGGGTGCTCCGCTACCGGCTCCTCTCCGTTGTGCTCTT 71
||| | ||||| ||||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1 CTCTGCAGGGCCGCCGGTGCGGGTGCTCCGCTACCGGCT-CTCTCCGTTGTGCTCTT 59

Qy 72 CTGCTCTCGGCTCCCCACCCCTCTCCCTCCCTCTCCCTGGCTCCCTCCTCTG 131
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 60 CTGCTCTCGGCTCCCCACCCCTCTCCCTCCCTCTCCCTGGCTCCCTCCTCTG 119

Qy 132 CAGCGCCTGCATTATTTCTGCCCGCAGGCTCGGCTTGCACTGCTGCTGCAGCCCCGGGA 191
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 120 CAGCGCCTGCATTATTTCTGCCCGCAGGCTCGGCTTGCACTGCTGCTGCAGCCCCGGGA 179

Qy	192 GGTGGCTGGGTGGGTGGGAGGAGACTGTGCAAGTTGAGGGGAGGGGGTGCCTCTTCT 251
Db	180 GGTGGCTGGGTGGGTGGGAGGAGACTGTGCAAG-TGTAGGGGAGGGGGTGCCTCTTCT 238
Qy	252 TCCCCGCTCCCTTCCCCGCCAACCTCCTTCCCCTCCTTCCCCTTCCCCTCCCCGCC 311
Db	239 TCCCCGCTCCCTTCCCCAGCCAAGTGGTCCCCTCCTTCCCCTCCCAGCC 298
Qy	312 CCCACCTTCTTCCTTCCGAAGGACTGGTAACCTGCGTGCAGCGAACGGCGCG 371
Db	299 CCCACCTTCTTCCTTCCGAAGGCTGGTAACCTGTTGTGCAGCGAGCGAA----- 350
Qy	372 CGCGCGGCGGGCGGCCACCATCCAGCGGGCACCATGGGACGTCCCGCTCTGGCGC 431
Db	351 -CGGCAGCGGGCGGCCACCATCCAGCGGGCACCATGGGACGTCCCGCTCTGGCGC 409
Qy	432 TCTGGCTGCTGCTCGCGCTGTGCTGGGCCCGGGAGAGCGGGCACCGAACCGGA 491
Db	410 TCTGGCTGCTGCTCGCGCTGTGCTGGGCCCGGGAGAGCGGGCACCGAACCGGA 469
Qy	492 GAAAAGCCAAATGTGAACCCCTCCAATTCCAGTCGACAAATGGTCGCTGTATTACGCTGT 551
Db	470 GAAAAGCCAAATGTGAACCCCTCCAATTCCAGTCGACAAATGGTCGCTGTATTACGCTGT 529
Qy	552 TGTGAAATGTGATGGGATGAAGACTGTGTTGACGGCAGTGATGAAAAGAACTGTGTAA 611
Db	530 TGTGAAATGTGATGGGATGAAGACTGTGTTGACGGCAGTGATGAAAAGAACTGTGTAA 589
Qy	612 AGAAGACGTGTGCTGAATCTGACTTCGTGCAACAATGCCAGTGTTCCCAGCCGAT 671
Db	590 AGAAGACGTGTGCTGAATCTGACTTCGTGCAACAATGCCAGTGTTCCCAGCCGAT 649
Qy	672 GGAAGTGTGATGGAGATCCTGACTGCGAACATGGTCAGATGAAAGCCCAGAACAGTGC 731
Db	650 GGAAGTGTGATGGAGATCCTGACTGCGAACATGGTCAGATGAAAGCCCAGAACAGTGC 709
Qy	732 ATATGAGAACATGCCGCATACATGAAATCAGCTGTGGGCCATTCTACTCAGTGTATCC 791
Db	710 ATATGAGAACATGCCGCATACATGAAATCAGCTGTGGGCCATTCTACTCAGTGTATCC 769
Qy	792 CAGTGTCTGGAGATGTGATGGTGAATGATTGTCAGTGGAGAACATGAAAGAAA 851
Db	770 CAGTGTCTGGAGATGTGATGGTGAATGATTGTCAGTGGAGAACATGAAAGAAA 829
Qy	852 GTGGCAATATAACATGTAGTCCGACGAGTCACCTGCTCCAGTGGCGCTGCATCTCCA 911
Db	830 GTGGCAATATAACATGTAGTCCGACGAGTCACCTGCTCCAGTGGCGCTGCATCTCCA 889
Qy	912 GGAACCTTGTATGCAATGGCCAGGATGACTGCGAGCGATGGCAGTGATGAGCTGGACTGT 971
Db	890 GGAACCTTGTATGCAATGGCCAGGATGACTGCGAGCGATGGCAGTGATGAGCTGGACTGT 949
Qy	972 CCCGCCAACCTGTGGGCCCATGAGTTCCAGTCAGCACCTCTCTGCATCCCCATCA 1031
Db	950 CCCGCCAACCTGTGGGCCCATGAGTTCCAGTCAGCACCTCTCTGCATCCCCATCA 1009
Qy	1032 GCTGGGTATGCGACGATGATGCAAGACTGCTCCGACCAATCTGATGAGTCCCTGGAGCAGT 1091
Db	1010 GCTGGGTATGCGACGATGATGCAAGACTGCTCCGACCAATCTGATGAGTCCCTGGAGCAGT 1069
Qy	1092 GTGGCGTCAGCCAGTCATACACACCAAGTGTCCAGGCCAGCGAACATCCAGTGCAGCTCG 1151
Db	1070 GTGGCGTCAGCCAGTCATACACACCAAGTGTCCAGGCCAGCGAACATCCAGTGCAGCTCG 1129
Qy	1152 GCGAGTGCATCCATAAGAAGTGGCGATGTGATGGGACCCCTGACTGCAAGGATGGCAGT 1211
Db	1130 GCGAGTGCATCCATAAGAAGTGGCGATGTGATGGGACCCCTGACTGCAAGGATGGCAGT 1189
Qy	1212 ATGAGGTCAACTGTCCCTCTGAACATTGCCGACCTGACCAATTGAATGTGAGGATGGCA 1271
Db	1190 ATGAGGTCAACTGTCCCTCTGAACATTGCCGACCTGACCAATTGAATGTGAGGATGGCA 1249

Qy	1272	GCTGCATCCATGGCAGCAGGGCAGTGTAAATGGTATCCGAGACTGTGTCGATGGTCGAT 1331
Db	1250	GCTGCATCCATGGCAGCAGGGCAGTGTAAATGGTATCCGAGACTGTGTCGATGGTCGAT 1309
Qy	1332	AAGTCAACTGCAAAATGTCAATCAGTGGCTGGGCCCTGGAAAATTCAAGTGCAGAACGTG 1391
Db	1310	AAGTCAACTGCAAAATGTCAATCAGTGGCTGGGCCCTGGAAAATTCAAGTGCAGAACGTG 1369
Qy	1392	GAGAATGCATAGATATCAGCAAAGTATGTAACCAGGAGCAGGACTGCAGGGACTGGAGTG 1451
Db	1370	GAGAATGCATAGATATCAGCAAAGTATGTAACCAGGAGCAGGACTGCAGGGACTGGAGTG 1429
Qy	1452	ATGAGCCCCTGAAAGAGTGTCAATAACGAATGCTTGTAAATAATGGTGGATTTCTC 1511
Db	1430	ATGAGCCCCTGAAAGAGTGTCAATAACGAATGCTTGTAAATAATGGTGGATTTCTC 1489
Qy	1512	ATATCTGCAAAGACCTAGTTAGGCTACGAGTGTGACTGTGCAGCTGGTTGAACGTGA 1571
Db	1490	ATATCTGCAAAGACCTAGTTAGGCTACGAGTGTGACTGTGCAGCTGGTTGAACGTGA 1549
Qy	1572	TAGATAGGAAAACCTGTGGAGATATTGATGAATGCCAAATCCAGGAATCTGCAGTCAA 1631
Db	1550	TAGATAGGAAAACCTGTGGAGATATTGATGAATGCCAAATCCAGGAATCTGCAGTCAA 1609
Qy	1632	TTTGTATCAACTAAAAGGCGTTACAAGTGTGAATGTAGTCGTGGTATCAAATGGATC 1691
Db	1610	TTTGTATCAACTAAAAGGCGTTACAAGTGTGAATGTAGTCGTGGTATCAAATGGATC 1669
Qy	1692	TTGCTACTGGCGTGTGCAAGGCAGTAGGCAAAGAGCCAAGTGTGATCTTCACTAACGAA 1751
Db	1670	TTGCTACTGGCGTGTGCAAGGCAGTAGGCAAAGAGCCAAGTGTGATCTTCACTAACGAA 1729
Qy	1752	GAGACATCAGGAAGATTGGCTTAGAGAGGAAAGAATATATCCAACTAGTTGAACAGCTAA 1811
Db	1730	GAGACATCAGGAAGATTGGCTTAGAGAGGAAAGAATATATCCAACTAGTTGAACAGCTAA 1789
Qy	1812	GAAACACTGTGGCTCTCGATGCTGACATTGCTGCCAGAAACTATTCTGGCCGATCTAA 1871
Db	1790	GAAACACTGTGGCTCTCGATGCTGACATTGCTGCCAGAAACTATTCTGGCCGATCTAA 1849
Qy	1872	GCCAAAAGGCTATCTCAGTGCCTCAATTGATGACAAGGTTGGTAGACATGTTAAAATGA 1931
Db	1850	GCC-AAAGGCTATCTCAGTGCCTCAATTGATGACAAGGTTGGTAGACATGTTAAAATGA 1908
Qy	1932	TCGACAATGTCTATAATCCTGCAGCCATTGCTGTTGATTGGGTGACAAGACCACACT 1991
Db	1909	TCGACAATGTCTATAATCCTGCAGCCATTGCTGTTGATTGGGTGACAAGACCACACT 1968
Qy	1992	GGACTGATGCGGCTCTAAGACTATTCAGTAGCTACCCCTAGATGGAACCAAGAGGAAGT 2051
Db	1969	GGACTGATGCGGCTCTAAGACTATTCAGTAGCTACCCCTAGATGGAACCAAGAGGAAGT 2028
Qy	2052	TCCGTGTTAACCTGACTTGCAGAGGCCTGCCATAGCTGTGGACCCACTGTCTGGCT 2111
Db	2029	TCCGTGTTAACCTGACTTGCAGAGGCCTGCCATAGCTGTGGACCCACTGTCTGGCT 2088
Qy	2112	TTGTTTACTGGTCAGACTGGGTGAACCACTAAATAGAAAAAGCAGGAATGAATTGGAT 2171
Db	2089	TTGTTTACTGGTCAGACTGGGTGAACCACTAAATAGAAAAAGCAGGAATGAATTGGAT 2148
Qy	2172	TCGATAGACGCCACTGGTACAGCGGAATCCAGTGCCTAACCGGAATTACACTTGACC 2231
Db	2149	TCGATAGACGCCACTGGTACAGCGGAATCCAGTGCCTAACCGGAATTACACTTGACC 2208
Qy	2232	TTATAAAAAGTCGCCCTCTATGGCTTGATTCTAAGTGCACATGTTATCCAGCGTGGACT 2291
Db	2209	TTATAAAAAGTCGCCCTCTATGGCTTGATTCTAAGTGCACATGTTATCCAGCGTGGACT 2268
Qy	2292	TGAATGGCCAAGATCGTAGGATAGTACTAAAGTCTCTGGAGTTCCCTAGCTCATCCCTTG 2351

Db	2269	TGAATGGCCAAGATCGTAGGATAGTACTAAAGTCTCTGGAGTTCTAGCTCATCCTCTG	2328
Qy	2352	CACTAACAAATTGAGGATCGTGTACTGGATAGATGGGAAAATGAAGCAGTCTATG	2411
Db	2329	CACTAACAAATTGAGGATCGTGTACTGGATAGATGGGAAAATGAAGCAGTCTATG	2388
Qy	2412	GTCGCAATAAATTCACTGGATCAGAGCTAGCCACTCTAGTCACAAACCTGAATGATGCC	2471
Db	2389	GTCGCAATAAATTCACTGGATCAGAGCTAGCCACTCTAGTCACAAACCTGAATGATGCC	2448
Qy	2472	AAGACATCATTGTCTATCATGAACCTGTACAGCCATCAGGTAAAAATTGGTGTGAAGAAG	2531
Db	2449	AAGACATCATTGTCTATCATGAACCTGTACAGCCATCAGGTAAAAATTGGTGTGAAGAAG	2508
Qy	2532	ACATGGAGAATGGAGGATGTGAATACCTATGCCTGCCAGCACAGATTAATGATCACT	2591
Db	2509	ACATGGAGAATGGAGGATGTGAATACCTATGCCTGCCAGCACAGATTAATGATCACT	2568
Qy	2592	CTCCAAAATATACTGTTCTGTCCCAGTGGTACAATGTAGAGGAAAATGCCGAGACT	2651
Db	2569	CTCCAAAATATACTGTTCTGTCCCAGTGGTACAATGTAGAGGAAAATGCCGAGACT	2628
Qy	2652	GTCAAA-----	2657
Db	2629	GTCAAAGTACTGCAACTACTGTGACTTACAGTGAGACAAAGATA CGAACACAACAGAAA	2688
Qy	2658	-----GGATCAATGTGACCACAGCAGTATCAGAGG	2687
Db	2689	TTTCAGCAACTAGTGGACTAGTTCTGGAGGGATCAATGTGACCACAGCAGTATCAGAGG	2748
Qy	2688	TCAGTGTCCCCAAAAGGGACTTCTGCCGCATGGCCATTCTCCTCTTGCTTTAG	2747
Db	2749	TCAGTGTCCCCAAAAGGGACTTCTGCCGCATGGCCATTCTCCTCTTGCTTTAG	2808
Qy	2748	TGATGGCAGCAGTAGGTGGCTACTTGATGTGGCGGAATTGGCAACACAAGAACATGAAA	2807
Db	2809	TGATGGCAGCAGTAGGTGGCTACTTGATGTGGCGGAATTGGCAACACAAGAACATGAAA	2868
Qy	2808	GCATGAACTTGACAATCCTGTACTGAAAACCCTGAAGAGGACCTCTCCATAGACA	2867
Db	2869	GCATGAACTTGACAATCCTGTACTGAAAACCCTGAAGAGGACCTCTCCATAGACA	2928
Qy	2868	TTGGTAGACACAGTGCTCTGGACACACGTACCCAGCAATATCAGTTGTAAGCACAG	2927
Db	2929	TTGGTAGACACAGTGCTCTGGACACACGTACCCAGCAATATCAGTTGTAAGCACAG	2988
Qy	2928	ATGATGATCTAGCTGACTTCTGTGACAAATGTTGACCTTGAGGTCTAAACAAATAATA	2987
Db	2989	ATGATGATCTAGCTGACTTCTGTGACAAATGTTGACCTTGAGGTCTAAACAAATAATA	3048
Qy	2988	CCCCCGTCGGAAATGTAACCGAGCCAGCAGCTGAAGTCTCTTCTCGGCTGG	3047
Db	3049	CCCCCGTCGGAAATGTAACCGAGCCAGCAGCTGAAGTCTCTTCTCGGCTGG	3108
Qy	3048	AAGAACATCAAGATACTTGCCTGGATCAAGCTTGACTTGACCGTTTATATTAC	3107
Db	3109	AAGAACATCAAGATACTTGCCTGGATCAAGCTTGACTTGACCGTTTATATTAC	3168
Qy	3108	TTTGTAAATATTCTGTCCACATTCTACTTCAGCTTGGATGTGGTTACCGAGTATCTG	3167
Db	3169	TTTGTAAATATTCTGTCCACATTCTACTTCAGCTTGGATGTGGTTACCGAGTATCTG	3228
Qy	3168	TAACCCTGAAATTCTAGACAGTATTGCCACCTCTGGCAAATATGCACTTCCCTAGAA	3227
Db	3229	TAACCCTGAAATTCTAGACAGTATTGCCACCTCTGGCAAATATGCACTTCCCTAGAA	3288
Qy	3228	AGCCATATTCCAGCAGTGAAACTTGTGCTATAGTGTATACCACTGTACATACATTGTAT	3287
Db	3289	AGCCATATTCCAGCAGTGAAACTTGTGCTATAGTGTATACCACTGTACATACATTGTAT	3348
Qy	3288	AGGCCATCTGTAATATCCGGACAAACGGGTTACTAAGATGAAATTGCCAAAAAATT	3347

Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
3349 AGGCCATCTGTAATATCCCAGAGAACAACTCACTATTCTTAAGCAGTTGAAAATATTTC 3408

Qy 3348 TAT 3350
 | | |
Db 3409 TAT 3411